

WHAT IS CLAIMED IS:

1. A multi-purpose solution comprising:
an aqueous liquid medium;
at least about 0.1 ppm to about 10 ppm cetylpyridinium chloride; and
a poly(oxypropylene)-poly(oxyethylene) block copolymer surfactant in an amount effective in cleaning a contact lens contacted with said solution.
2. The solution as in claim 1, wherein the solution comprises at least about 0.5 ppm to about 9 ppm cetylpyridinium chloride.
3. The solution as in claim 1, wherein the poly(oxypropylene)-poly(oxyethylene) block copolymer surfactant is selected from the group consisting of Tetronic® 1307, Tetronic® 1304, Tetronic® 1107, Tetronic® 904 and Pluronic® F87.
4. The solution as in claim 1, further comprising a second antimicrobial component.
5. The solution as in claim 1, further comprising a viscosity inducing component selected from the group consisting of cellulosic derivatives and mixtures thereof in the range of at least about 0.05% to about 5.0% (w/v) of the total solution.
6. The solution as in claim 1, further comprising a buffer component in an amount effective in maintaining the pH of said solution within a physiologically acceptable range.
7. The solution as in claim 1, wherein the buffer is selected from the group consisting of boric acid/sodium hydroxide buffers and boric acid/sodium borate buffers.
8. A multi-purpose solution for contact lens care comprising:
an aqueous liquid medium;
at least about 0.1 ppm to about 10 ppm cetylpyridinium chloride;

- a poly(oxypropylene)-poly(oxyethylene) block copolymer surfactant in an amount effective in cleaning a contact lens contacted with said solution;
- a buffer component in an amount effective in maintaining the pH of said solution within a physiologically acceptable range;
- a viscosity inducing component selected from the group consisting of cellulosic derivatives and mixtures thereof;
- a chelating component; and
- a tonicity component in an amount effective in providing the desired tonicity to said solution.
9. The multi-purpose solution of claim 8, further comprising a second antimicrobial component.
 10. The multi-purpose solution of claim 8, wherein the second antimicrobial component is present in an amount ranging from at least about 0.1 ppm to about 3 ppm.
 11. The multi-purpose solution of claim 8, wherein the poly(oxypropylene)-poly(oxyethylene) block copolymer surfactant is present in an amount in a range of at least about 0.01% to about 1.0% (w/v).
 12. The multi-purpose solution of claim 8, wherein the buffer component includes boric acid.
 13. The multi-purpose solution of claim 8, further comprising taurine.
 14. A method for maintaining ocular tissue cell membrane integrity during contact lens wear comprising contacting the lens with an aqueous solution comprising from about 0.1 to about 10 ppm of cetylpyridinium chloride and a poly(oxypropylene)-poly(oxyethylene) block copolymer surfactant in an amount effective to clean a contact lens contacted with said solution.

15. The method for disinfecting according claim 14, wherein the aqueous solution further comprises a component selected from the group consisting of a second antimicrobial agent, a viscosity inducing agent, a chelating agent, a buffer, taurine and a tonicity component.
16. A method for maintaining ocular tissue cell membrane integrity during contact lens wear ✓
comprising contacting a lens positioned in a user's eye with an isotonic aqueous solution comprising:
an aqueous liquid medium;
at least about 0.1 to about 10 ppm cetylpyridinium chloride;
taurine in an amount effective to protect ocular tissue cell membranes;
a poly(oxypropylene)-poly(oxyethylene) block copolymer surfactant in an amount effective to clean a contact lens contacted with said solution;
a buffer component in an amount effective in maintaining the pH of said solution within a physiologically acceptable range;
a viscosity inducing component selected from the group consisting of cellulosic derivatives and mixtures thereof in the range of about 0.05% to about 5.0% (w/v) of the total solution;
a chelating component in an amount of less than 0.05% (w/v) of the total solution; and
a tonicity component in an amount effective in providing the desired tonicity to said solution.
17. A process for mitigating ocular tissue insult comprising: ✓

administering an aqueous liquid medium to a user's eye, the aqueous liquid medium comprising:

at least about 0.1 to about 10 ppm cetylpyridinium chloride; and

a poly(oxypropylene)-poly(oxyethylene) block copolymer surfactant in an amount effective in cleaning a contact lens contacted with said solution.

18. The process of claim 17, wherein administering step is conducted so that the aqueous liquid medium is temporarily emplaced in the user's eye.
19. The process of claim 17, wherein administering step is conducted so that uptake of the aqueous liquid medium into at least one of a soft-contact lens and a rigid gas permeable lens is achieved.
20. The process of claim 17, wherein the aqueous liquid medium further comprises a second antimicrobial component.
21. A multi-purpose solution comprising:
an aqueous liquid medium;
at least about 0.1 to about 10 ppm of cetylpyridinium chloride;
a second antimicrobial agent;
a poly(oxypropylene)-poly(oxyethylene) block copolymer surfactant in an amount effective in cleaning a contact lens contacted with said solution; and
taurine in an amount effective to protect ocular tissue cell membranes.
22. A multi-purpose contact lens disinfecting and cleaning solution comprising:
an aqueous liquid medium;
from about 0.1 ppm to about 10 ppm cetylpyridinium chloride; and

- a non-ionic surfactant in an amount effective in cleaning a contact lens contacted with said solution.
23. The solution as in claim 22, wherein the solution comprises from about 0.5 ppm to about 9 ppm cetylpyridinium chloride.
 24. The solution as in claim 22, wherein the solution comprises from about 1 ppm to about 5 ppm cetylpyridinium chloride.
 25. The solution as in claim 22, wherein the non-ionic surfactant is a poly(oxypropylene)-poly(oxyethylene) block copolymer.
 26. The solution as in claim 25, wherein the poly(oxypropylene)-poly(oxyethylene) block copolymer surfactant is selected from the group consisting of Tetronic® 1307, Tetronic® 1304, Tetronic® 1107, Tetronic® 904, Tetronic® 904 and Pluronic® F87.
 27. The solution as in claim 22, further comprising a second antimicrobial component.
 28. The solution as in claim 27, wherein the second antimicrobial component is selected from the group consisting of polyhexamethylene biguanide, a polyhexamethylene biguanide salt and polyquaternium-1.
 29. The solution as in claim 22, further comprising a viscosity inducing component selected from the group consisting of cellulosic derivatives and mixtures thereof in the range of about 0.05% to about 5.0% (w/v) of the total solution.
 30. The solution as in claim 22, further comprising a chelating component in an amount of less than 0.05% (w/v) of the total solution.
 31. The solution as in claim 22, further comprising a tonicity component in an amount effective in providing the desired tonicity to the solution.

32. The solution as in claim 22, further comprising a buffer component in an amount effective in maintaining the pH of said solution within a physiologically acceptable range.
33. The solution as in claim 32, wherein the buffer is selected from the group consisting of boric acid/sodium hydroxide buffers and boric acid/sodium borate buffers.
34. A multi-purpose solution for contact lens care comprising:
an aqueous liquid medium;
from about 0.1 ppm to about 10 ppm cetylpyridinium chloride;
a non-ionic surfactant in an amount effective in cleaning a contact lens contacted with said solution;
a buffer component in an amount effective in maintaining the pH of said solution within a physiologically acceptable range;
a viscosity inducing component selected from the group consisting of cellulosic derivatives and mixtures thereof;
a chelating component; and
a tonicity component in an amount effective in providing the desired tonicity to said solution.
35. The multi-purpose solution of claim 34, further comprising a second antimicrobial component.
36. The multi-purpose solution of claim 35, wherein the second antimicrobial component is selected from the group consisting of biguanides, biguanide polymers, monomeric and polymeric quaternary ammonium compound, salts thereof and mixtures thereof.

37. The multi-purpose solution of claim 35, wherein the second antimicrobial component is present in an amount ranging from about 0.1 ppm to about 3 ppm.
38. The multi-purpose solution of claim 44, wherein the non-ionic surfactant is a block copolymer, and is present in an amount in a range of about 0.01% to about 1.0% (w/v).
39. The multi-purpose solution of claim 34, wherein the buffer component includes boric acid.
40. The multi-purpose solution of claim 34, wherein the buffer component is present in an amount in a range of about 0.01% to about 1% (w/v).
41. The multi-purpose solution of claim 34, wherein the viscosity inducing component is hydroxypropylmethyl cellulose.
42. The multi-purpose solution of claim 34, wherein the viscosity inducing component is present in the range of about 0.05% to about 5.0% (w/v) of the total solution.
43. The multi-purpose solution of claim 34, wherein the tonicity component includes a combination of sodium chloride and potassium chloride and is present in a range of about 0.4% to about 1.5% (w/v).
44. The multi-purpose solution of claim 34, wherein the chelating component is EDTA.
45. The multi-purpose solution of claim 34, wherein the chelating component is present in an amount of less than 0.05% (w/v) of the total solution.
46. The multi-purpose solution of claim 34, further comprising taurine.
47. A method for maintaining ocular tissue cell membrane integrity during contact lens wear comprising contacting the lens with an aqueous solution comprising from about 0.1 to

- about 10 ppm of cetylpyridinium chloride and a non-ionic surfactant in an amount effective to clean a contact lens contacted with said solution.
48. The method for disinfecting according claim 47, wherein the aqueous solution further comprises a component selected from the group consisting of a second antimicrobial agent, a viscosity inducing agent, a chelating agent, a buffer, taurine and a tonicity component.
49. A method for maintaining ocular tissue cell membrane integrity during contact lens wear comprising contacting a lens positioned in a user's eye with an isotonic aqueous solution comprising:
- /
- an aqueous liquid medium;
- from about 0.1 to about 10 ppm cetylpyridinium chloride;
- taurine in an amount effective to protect ocular tissue cell membranes;
- a non-ionic surfactant in an amount effective to clean a contact lens contacted with said solution;
- a buffer component in an amount effective in maintaining the pH of said solution within a physiologically acceptable range;
- a viscosity inducing component selected from the group consisting of cellulosic derivatives and mixtures thereof in the range of about 0.05% to about 5.0% (w/v) of the total solution;
- a chelating component in an amount of less than 0.05% (w/v) of the total solution; and
- a tonicity component in an amount effective in providing the desired tonicity to said solution.
- ✓
50. A process for mitigating ocular tissue insult comprising:

administering an aqueous liquid medium to a user's eye, the aqueous liquid medium comprising:

from about 0.1 to about 10 ppm cetylpyridinium chloride; and

a non-ionic surfactant in an amount effective in cleaning a contact lens contacted with said solution.

51. The process of claim 50, wherein administering step is conducted so that the aqueous liquid medium is temporarily emplaced in the user's eye.
52. The process of claim 50, wherein administering step is conducted so that uptake of the aqueous liquid medium into at least one of a soft-contact lens and a rigid gas permeable lens is achieved.
53. The process of claim 50, wherein the aqueous liquid medium further comprises a second antimicrobial component.
54. A multi-purpose solution comprising: /
an aqueous liquid medium;
from about 0.1 to about 10 ppm of cetylpyridinium chloride;
a second antimicrobial agent;
a non-ionic surfactant in an amount effective in cleaning a contact lens contacted with
said solution; and
taurine in an amount effective to protect ocular tissue cell membranes.
55. A multi-purpose solution comprising: /
an aqueous liquid medium;
at least about 0.1 ppm to about 2 ppm cetylpyridinium chloride.
56. The solution as in claim 55, further comprising a second antimicrobial component.

57. The solution as in claim 55, wherein the second antimicrobial component is selected from the group consisting of polyhexamethylene biguanide, a polyhexamethylene biguanide salt and polyquaternium-1.